

**Amendments to the Claims:**

This listing of claims replaces any and all prior claim lists.

**Listing of Claims:**

Claim 1 (original). A method for manufacturing a compound semiconductor epitaxial substrate comprising a step of epitaxially growing an InGaAs layer on an InP single crystal substrate or on an epitaxial layer lattice-matched to the InP single crystal substrate under conditions of

ratio of V/III: 10 - 100,

growth temperature: 630°C - 700°C, and

growth rate: 0.6  $\mu\text{m/h}$  - 2  $\mu\text{m/h}$ .

Claim 2 (original). The method according to claim 1, wherein the InP single crystal substrate has a plane direction accuracy of  $\pm 0.05^\circ$  in the (100).

Claim 3 (currently amended). The method according to claim ~~1 or 2~~ claim 1, wherein the epitaxially growing is carried out by using ~~MOCVD~~ metal-organic chemical vapor deposition (MOCVD).

Claim 4 (currently amended). The method according to ~~any of claims 1-3~~ claim 1, wherein ~~gallium raw material used for the~~ epitaxially growing of the InGaAs layer includes use of gallium raw material is selected from the group consisting of trimethyl gallium and triethyl gallium.

Claim 5 (currently amended). The method according to ~~any of claims 1-4~~ claim 1, wherein ~~indium raw material used for the~~ epitaxial growing of the InGaAs layer includes use of indium raw material ~~is comprising~~ trimethyl indium.

Claim 6 (currently amended). The method according to ~~any of claims 1-5~~ claim 1, wherein the epitaxial growing of the InGaAs layer includes use of arsenic raw material ~~is comprising~~ arsine.

Claim 7 (original). A method for reducing concave defects in a compound semiconductor epitaxial substrate comprising a step of epitaxially growing an InGaAs layer on an InP single crystal substrate or on an epitaxial layer lattice-matched to the InP single-crystal substrate under conditions of

ratio of V/III: 10 to 100,

growth temperature: 630°C - 700°C, and

growth rate: 0.6  $\mu\text{m/h}$  - 2  $\mu\text{m/h}$ .

Claim 8 (currently amended). A compound semiconductor epitaxial substrate obtained by using the method according to ~~any of claims 1-6~~ claim 1.